FOGTEC PROTECTION OF M4 METRO LINE IN BUDAPEST

After successful implementation and positive experience with FOGTEC high pressure water mist systems to protect 9 individual metro stations at the M2 metro line in Budapest, the metro operator BKV decided to carry forward the same fire protection concept to the new M4 metro line in Budapest.

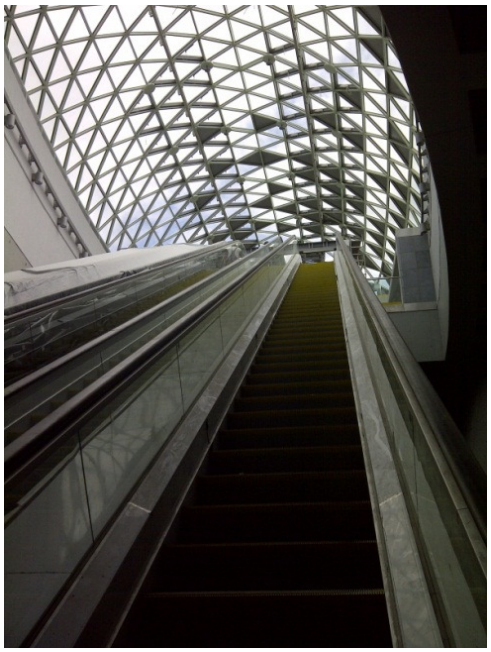
The construction of Budapest's fourth metro line began in 2006, despite the fact that the Hungarian capital's public transit corporation and government agencies have been planning the construction of the line for over 30 years. The M4 metro line will have 10 stations and the first section and will be 7,3 km in length.

The FOGTEC protection concept is to rapidly and efficiently control and suppress a detected fire with minimum amount of water. This is achieved by atomizing the water in minute droplets. The FOGTEC high pressure water mist technology is capable of attaining the protective aims in respect of limiting the fire spread, lowering the temperatures and partly washing the smoke like no other firefighting agent. Due to the high pressure level of around 100 bar and the very small amounts of water required, problems pertaining to pipeline dimensioning, containing the extinguishing water and the risk related to combustible liquids do not occur.

The achievement of these objectives without negative effects allows people and the tunnel structure to be protected so that traffic can quickly start moving again after a fire, assuring the necessary social and economic mobility. For metro application a fixed FOGTEC high pressure water mist firefighting system is the most adequate solution.

As part of the overall safety strategy of the stations, the FOGTEC system protects the platform areas by nozzles being installed in the rail areas, escalators and technical rooms. The water mist system shall assure that people can safely be evacuated from the underground stations in case of fire. The systems will be automatically activated once a fire has been detected and localized. To effectively fight initial fires, high pressure wall hydrants have been installed at the platform levels. A total of 10 separate metro stations along the new M4 line will be protected by a total of 2500 nozzles and 30 high pressure wall hydrants being supplied by 10 FOGTEC pump stations.

FOGTEC Brandschutz GmbH & Co. KG
Schanzenstraße 19A 51063 Köln
Telefon: +49 221 96223-0
Fax : +49 221 96223-30
www.FOGTEC.com



Additionally to the stations the control center of the M4 line has been protected by an individual FOGTEC pump systems. 350 automatic nozzles are protecting all technical areas and control rooms and assure minimal business interruption in case of fire. Potential water damages within the modern control building are reduced to a minimum. It has been very beneficial for the client that the space requirement for the FOGTEC pump system could be reduced to a minimum due to the use of the new compact pump unit.

The entire metro depot of line M4 in Budapest has been protected by a FOGTEC system as well. A total of 920 open nozzles are protecting the metro trains inspection and maintenance hall from underneath the train vehicles where the main fire risks are located. Additional 51 high pressure wall hydrants are foreseen at strategic locations within the maintenance hall to manually fight a potential fire within the metro train vehicles. A large FOGTEC pump station with 11 high pressure pumps ensures the simultaneous operation of 3 complete parallel tracks and the respective wall hydrants.

The operator BKV is has collected very positive experiences with the FOGTEC high pressure water mist systems in the metro stations and has implemented a training center with live FOGTEC installations in rail track, escalator and cable tunnel area to train the operation personnel on the FOGTEC technology, thus ensuring the highest possible safety standard.

FOGTEC Brandschutz GmbH & Co. KG
Schanzenstraße 19A 51063 Köln
Telefon: +49 221 96223-0
Fax : +49 221 96223-30
www.FOGTEC.com